HYDROBAENUS CRANSTONI N. SP. (DIPTERA: CHIRONOMIDAE) FROM NORTH-WEST SPAIN

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On 29.i.1986 amongst some chironomid pupal exuviae and pharate adults collected from the River Sar (Galicia, north-west Spain) by F. Cobo was a pharate adult male that defied identification at the time. Through discussion with P. S. Cranston at the British Museum (Natural History) it was concluded that the specimen was of a hitherto undescribed *Hydrobaenus*. Since that time efforts by both authors to collect further specimens of any life-history stage at the original collection site and elsewhere in Galicia have been unsuccessful. Slide-mounted pharate adult chironomids obscure some adult and pupal characters, but as the species is easily recognized in both pupal and adult stages on the structures visible in the specimen, it seems best to describe it and supplement the description when more material is obtained.

DESCRIPTION

Hydrobaenus cranstoni n. sp.

Holotype deposited in Zoologische Staatssammlung, Munich.

Adult male

Head. Antenna: pedicellus 100 μm long, 145 μm wide; flagellomere 1 75 μm long, 45 μm wide; 2 30 μm long, 45 μm wide; 3 33 μm long, 45 μm wide; 4 33 μm long, 45 μm wide; 13 (last) 630 μm long; total length of flagellomeres 1–12 470 μm; AR 1.34. Palp: length of segment 1 30 μm; 2 37 μm; 3 100 μm; 4 93 μm; 5 135 μm. (Setae of head obscured.)

Thorax (Figure 1). Three dorsocentrals set on white spots, 70–80 μm long, two prealars, 75 μm long, six (?) scutellars, five acrostichals, starting at anterior third of scutum. Squama fringed with about 14 setae. Comb of tibia III of 13 spines; longest 40 μm, shortest 20 μm long.

Hypopygium (Figure 2). Tergite IX with 28 setae. Latero-sternite IX with 11 setae. Phallapodeme 115 μm long. Transverse sternapodeme 87 μm long. Gonocoxite 210 μm long; basal lobe posteriorly directed, smooth apically. Gonostyle 117 μm long; crista

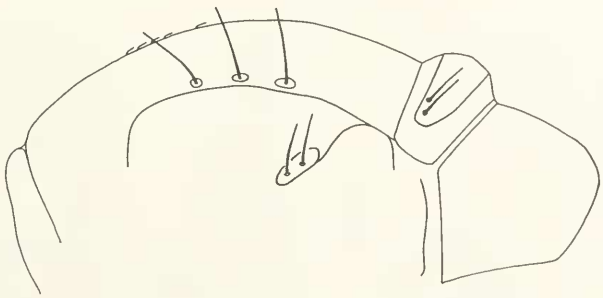

Fig. 1. *Hydrobaenus cranstoni* sp. n. dorsal part of thorax lateral.

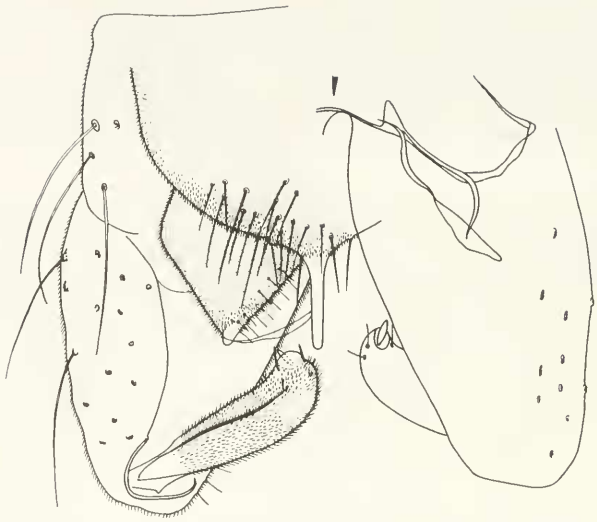

Fig. 2. *Hydrobaenus cranstoni* sp. n. hypopygium dorsal.

dorsalis absent. Anal point 53 μm long, parallel-sided, smooth. Virga apparently with two spines.

Pupa (Figure 3).

Hydrobaenus Pel in Langton 1991.

Frontal warts strongly projecting. Cephalic tubercles flat-conical; frontal setae 70 μm long. Thoracic horn (Figure 3A) 350 μm long, 60 μm wide; ThR 5.8. Precorneal setae 40, 40, 110 μm long. PSB well-developed on segment II; PSA present on segments IV–VII. Dorsal anterior transverse apodeme of segment II incomplete medially (Figure 3B). Hook row II with about 50 hooks. Segment VIII with five lateral filamentous setae, VII with four, and VI apparently with one. Fringe of anal lobes (Figure 3C) with 22/24 filaments; longest about 70 μm long, 3.5 μm wide; extending the whole length of the anal lobes. Anal macrosetae broken off; 4 μm wide at base. Anal lobes 310 μm long, 175 μm wide; ALR 1.8.

Habitat

The river Sar at Bertamirans (UTM 29NH3045) where this specimen was collected is organically polluted to a visually unpleasant degree: ammonium 196.6 mg/l, nitrate 7.0 mg/l, nitrite 388.0 μg/l, orthophosphate 660.6 μg/l (Cobo & Gonzalez, 1991). Nevertheless, collections here provide a selection of chironomids normally associated with much cleaner water: e.g. *Brillia modesta* (Meig.), *Cricotopus* (s. str.) *annulator* Goetghebuer, *Eukiefferiella claripennis* (Lundbeck), *Orthocladius* (s. str.) *rubicundus* (Meig.), *Paratrichocladius rufiventris* (Meig.), *Rheocricotopus chalybeatus* (Edw.), *Prodiamesa olivacea* (Meig.), and *Phaenopsectra* Pel in Langton (1991); however, the species normally associated with organically polluted water, *Chironomus riparius* Meig. is also present. According to Sæther (1976) *Hydrobaenus* spp. occur in a wide range of aquatic habitats, but usually oligotrophic. Investigations upstream of the site have not yet revealed the origin of these

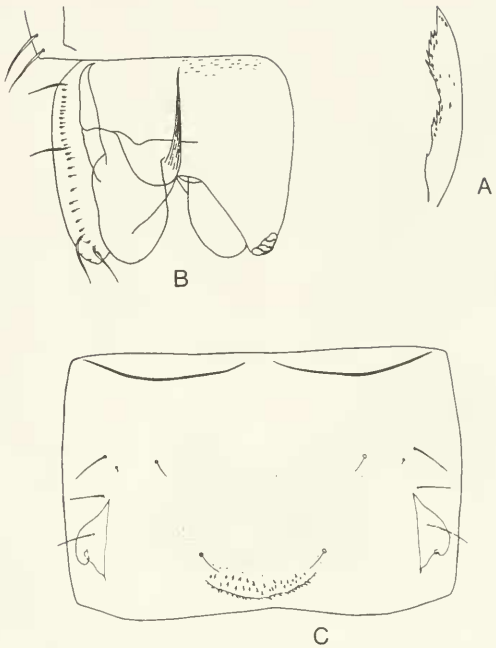

Fig. 3. *Hydrobaenus cranstoni* sp. n. pupa: A, thoracic horn; B, anal segment ventral left, dorsal right; C, segment II dorsal.

clean-water species. (For a detailed discussion of the habitats of the River Sar see Cobo & Gonzalez 1991.)

ACKNOWLEDGEMENT

We are very grateful to P. S. Cranston for his opinions on this specimen and have pleasure in naming the species in his honour.

REFERENCES

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Sæther, O. A. 1976. Revision of *Hydrobaenus*, *Trissocladius*, *Zalutschia*, *Paratrissocladius* and some related genera (Diptera: Chironomidae). *Bull. Fish. Res. Board Can.* **195**: 1–287.

BOOK REVIEW

A review of scarce and threatened Coleoptera of Great Britain Part 1, UK Nature Conservation No. 3 by P. S. Hyman, revised and updated by M. S. Parsons. Joint Nature Conservation Committee, Peterborough, 1992, 484 pages, £18, paperback.— This, part one of a two-volume work, lists and aims to provide information relevant to aiding the conservation of some 1043 scarce and threatened beetle species occurring